MANTHEY - RACING

Installation manual

Windshield polycarbonate

MTH541911

Version _V2_2017/12

Contact

Manthey-Racing GmbH

Technical Support

Rudolf-Diesel-Str. 11-13

53520 Meuspath

Germany

Phone: +49 (0) 2691 9338 807

E-Mail: techsupport@manthey-racing.de

Note

Due to the ongoing optimization of our products, this document will be updated on a regular basis. Please note that only the current version of this document is valid. The current documents are available in the download area.

Download area:

The installation and operating instructions as well as the technical manuals are available for download under the following link.

http://www.manthey-racing.de/downloads.htm

Warning and safety instructions

The classification of the warning and safety information is made using the respective signal word (Danger, Warning, Caution) in addition to the warning icon.

DANGER	**Warning of death or serious bodily injuries, which will occur in the event of non-compliance.**
WARNING	**Warning of death or serious bodily injuries, which may occur in the event of non-compliance.**
ATTENTION	**Warning of minor bodily injuries in the event of non-compliance.**
NOTE	**Warning of property damage in the event of non-compliance.**

General safety instructions

DANGER

Risk of injury and risk of accident during and after work on the vehicle

- Repairs are to be carried out only if access to the repair handbooks in the PIWIS Information System is also available
- Observe the safety instructions
- Observe the repair handbooks of the vehicle series in the PIWIS Information System.

DANGER

Crashing vehicle

Squeezing or crushing

Damage to the vehicle

- Do not place any rigid objects under the lifted vehicle.
- Secure lifting platform against lowering.
- Remove any rigid objects before lowering.
- Lift the vehicle only at the pick-up points designatedfor this purpose.
- The outer pick-up points should be used as a matterof priority.

WARNING

Improper handling of safety-relevant fitting

Injuries

Torque reduction

- Use new fastening screws and nuts after every dismantling
- Observe the specified tightening torques.
- Visually inspect the parts used

NOTE

Always observe the currently valid „Technical Information“ (TI) of Porsche AG. These can be viewed and downloaded at ***motorsport.porsche.de***.

If you do not have access to this portal, please contact ***gt4clubsport@porsche.de*.**

Always use this manual in accordance with the currently valid Technical Information (TI) of the Porsche AG.

WARNING Working with compressed air

Eye injuries

Damage and contamination of components

- Wear safety goggles with side shield.
- Secure the compressed air discharge point with suitable materials.
- Place the compressed air discharge point on suitable areas.

WARNING Toxic exhaust fumes

Suffocation

- When the engine is running, position the exhaust gas extraction system behind the exhaust end pipes of the vehicle and switch it on.

WARNING Falling objects or loads

Squeezing or crushing

- Secure components against falling.

WARNING Flying foreign bodies during grinding, drilling and milling

Eye injuries

- Wear safety goggles.

WARNING No heat-resistant materials

Fire

- Avoid contact with hot components or sources of ignition.

ATTENTION Sharp or sharp-edged objects

Cracks, punctures, cuts

- Wear personal protective equipment.

ATTENTION Hot components

Burns

- Allow hot components to cool down.
- Wear personal protective equipment.

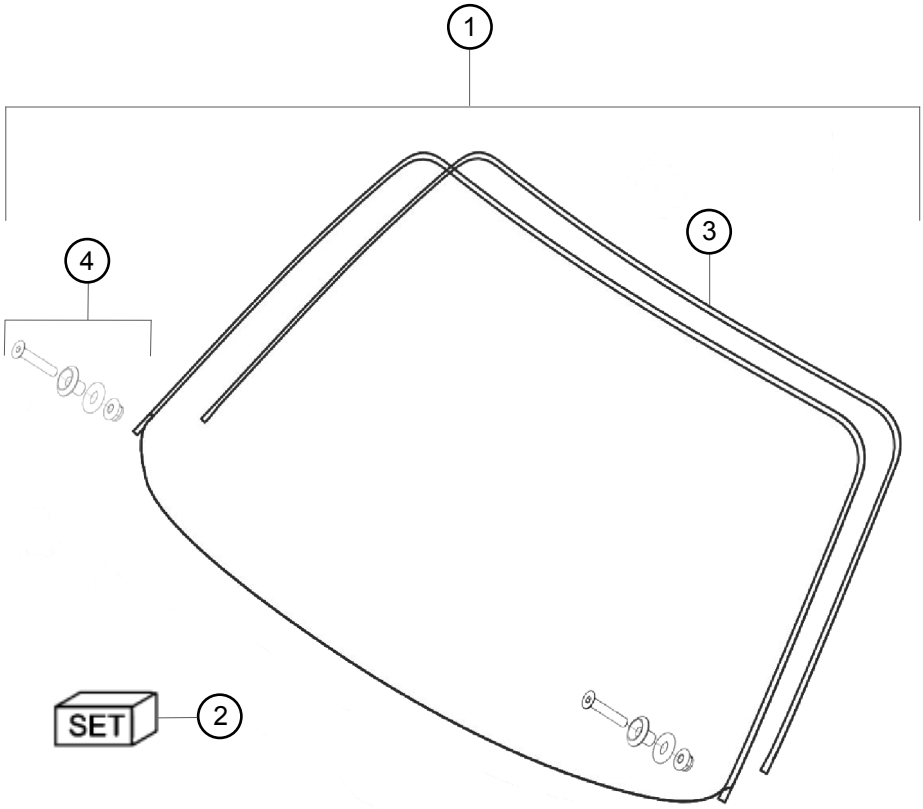
ATTENTION Heavy components

Crushing

- Wear personal protective equipment.
- If necessary call somebody to help you.

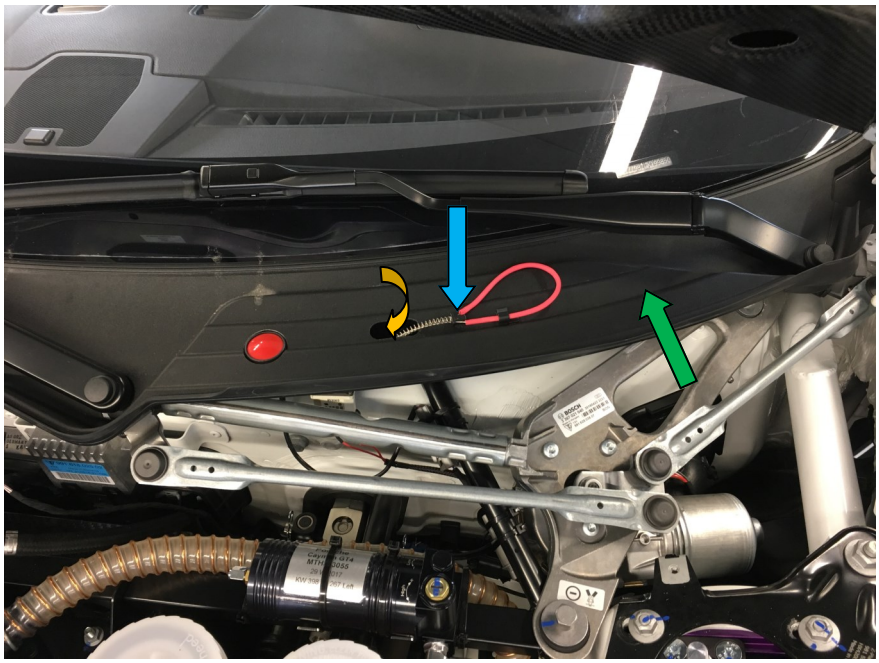
Observe the repair handbooks of the production vehicle!

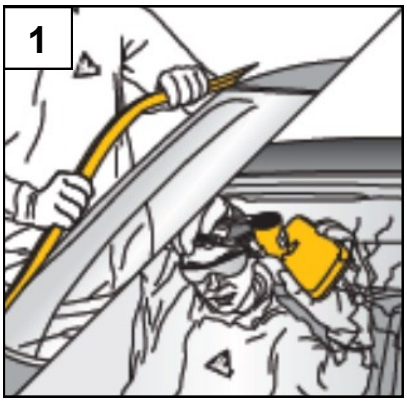
Overview windshield polycarbonate (MTH541911)



Pos.	Bezeichnung / Description	M	Anzahl/ pieces	Teile Nr. / Part no.
1	**WINDSCHUTZSCHEIBE** **PC+HC+ZBH** WINDSHIELD PC+HC+ZBH		1	MTH541911
2	**KLEBESATZ F. POLYCARBONAT-SCHEIBE** GLUE SET		1	MTH541915
3	**DICHTUNG** SEALING		1	MTH5411919
4	**BEFESTIGUNGSSATZ WINDSCHUTZSCHEIBE** MOUNTING SET WINDSHIELD		1	MTH5411918

Step 1:





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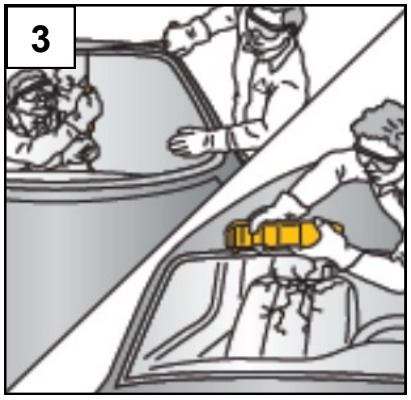
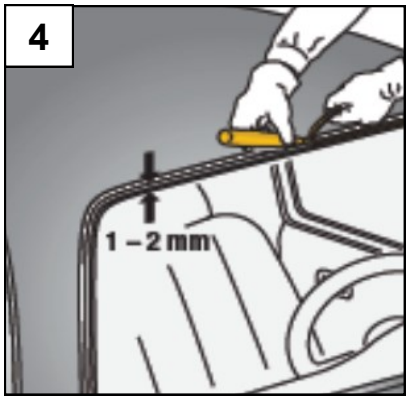
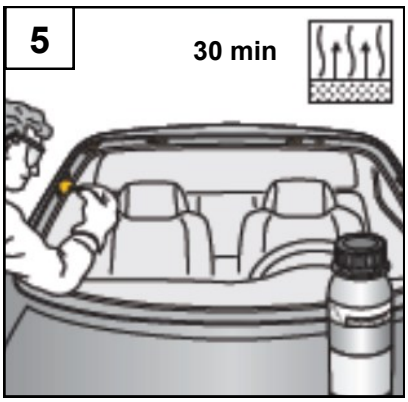






Step 1:

Release the pull for the emergency stop switch and guide it down through the opening.

(1) Remove the wipers, rear-view mirror and the cowl panel according to the repair manuals of the Porsche AG.

(2) Protect surrounding body parts with masking tape from damage when removing and installing the windscreen.

NOTE

Make sure that the fire extinguishing system is deactivated. Otherwise, this can be triggered when working on the cowl panel.

Step 2:

Disassemble the windshield according to the manufacturer's specifications.

⚠ WARNING

Wear personal protective equipment. Danger of sharp-edged glass fragments. Wear protective goggles and suitable gloves.
Cut remaining adhesive back with a suitable tool to 1-2mm.

Do not dirt the cutted adhesive bead and keep it free of grease. This serves as a primer for the new bond.

Smaller damages caused during removal of the windscreen can be repaired with the primer 207 included in the kit.

NOTE

Leave area treated with Primer 207 for 30 minutes (at 20°C). Do not use Primer 207 at temperatures below 5°C.

Step 3:

The polycarbonate windshield must be prepared for assembly in the following steps.

First, the holes for the securing screws are marked on the left and right side of the windshield using the supplied template. Make sure the template is correctly aligned with the outer and lower edges of the windscreen.

To mark the right side, the "R" on the template must be visible. For the marking of the left side the stencil must be turned over.

Pre-drill the windshield at the marked positions with a 4.0mm drill. Drill to final diameter with a 10.0mm drill bit.

NOTE

The drills must be sharp. Drill with low pressure. Remove the chips carefully.

Step 4:

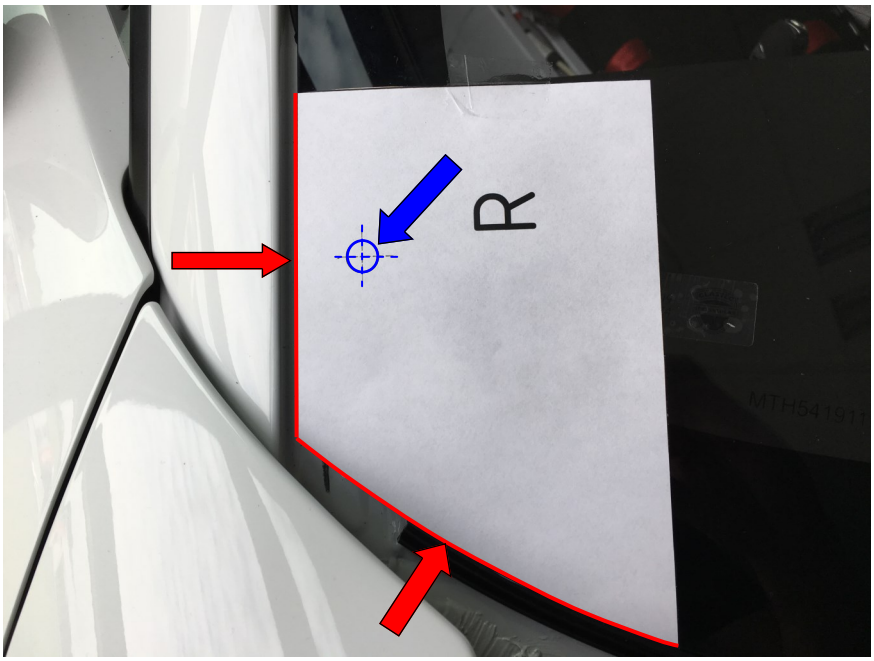
Fix the supplied retaining strip (self-adhesive) in the middle at the lower edge of the windshield.

Attach the circumferential sealing lip (self-adhesive) as shown in the picture.

NOTE

If the adhesive strip of the sealing lip does not stick optimally, the adhesive force of the adhesive strip can be improved by gentle heating (about 40°C).

Step 3:



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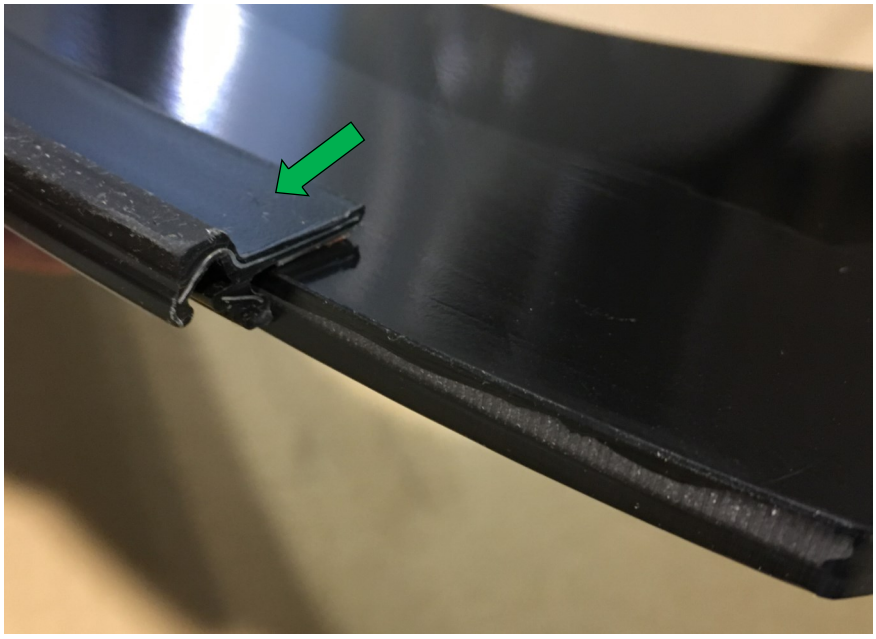

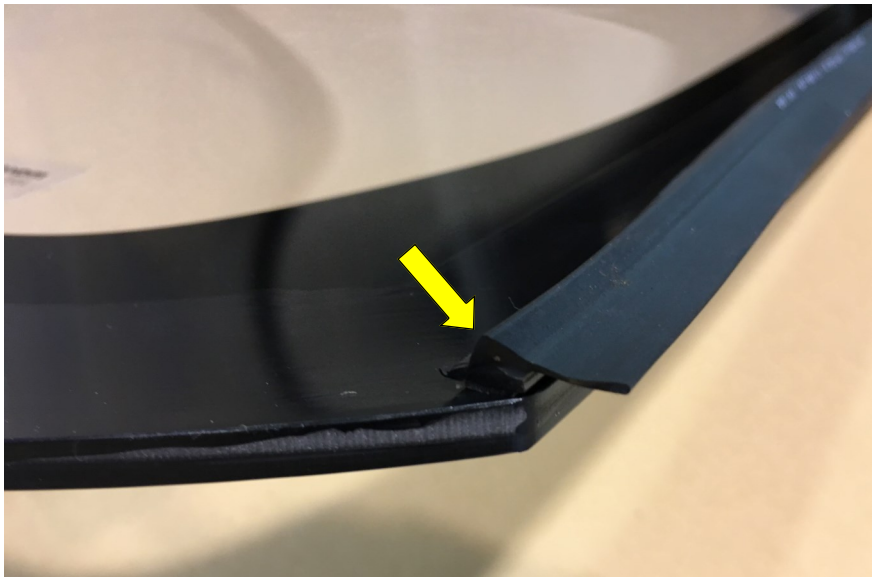

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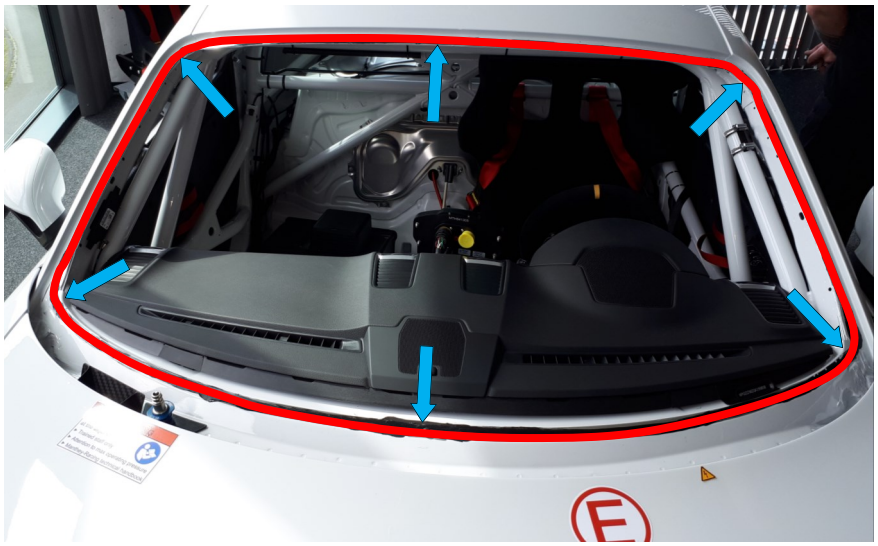
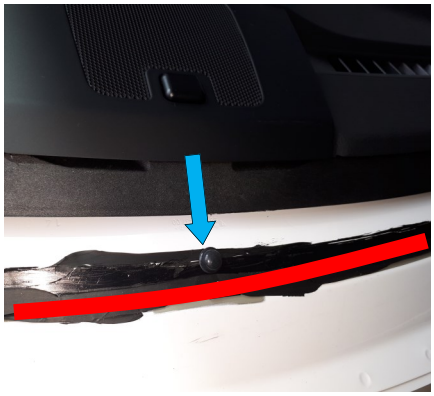
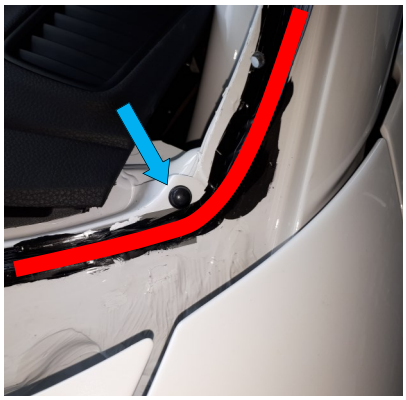
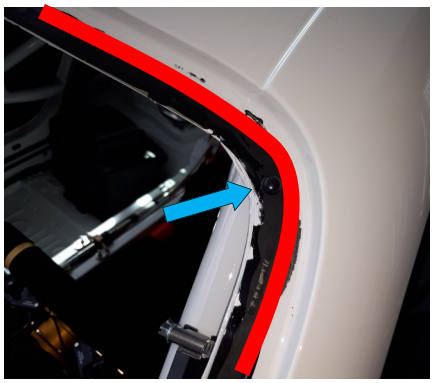
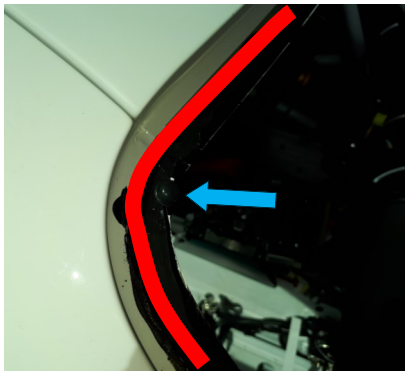
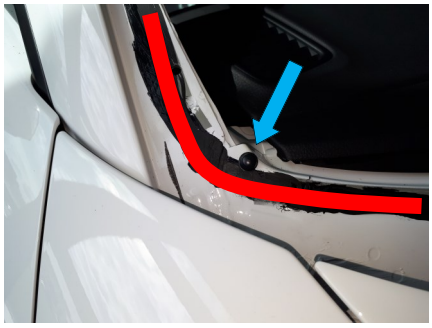


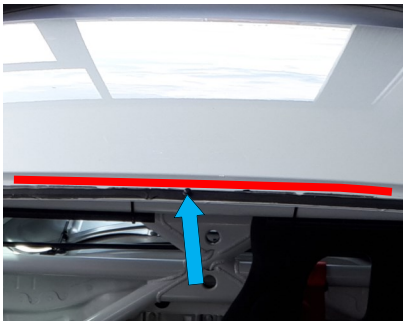












Step 5:

Place the six included spacers in the positions on the windshield frame as shown. The spacers must be positioned within the gluing area. Make sure that the spacers are resting flat on the windscreen frame so that the windshield can be positioned correctly. Failure to do so may cause the windshield to overhang the window frame later.

NOTE

The spacers must be installed at the positions shown in the pictures to ensure a sufficiently high adhesive bead when bonding the polycarbonate windscreen.

Step 6:

Insert the polycarbonate windscreen for trail to mark the two holes on the windshield frame.

The gap between the screen and the body should be between 4-5mm.

If the windshield is aligned, mark the two holes on the frame and mark the exact position of the screen in several places with suitable tools.

NOTE

This step should be done by two people.

Once the holes on the frame and the exact position of the windshield have been determined, the windshield can be lifted off the vehicle again.

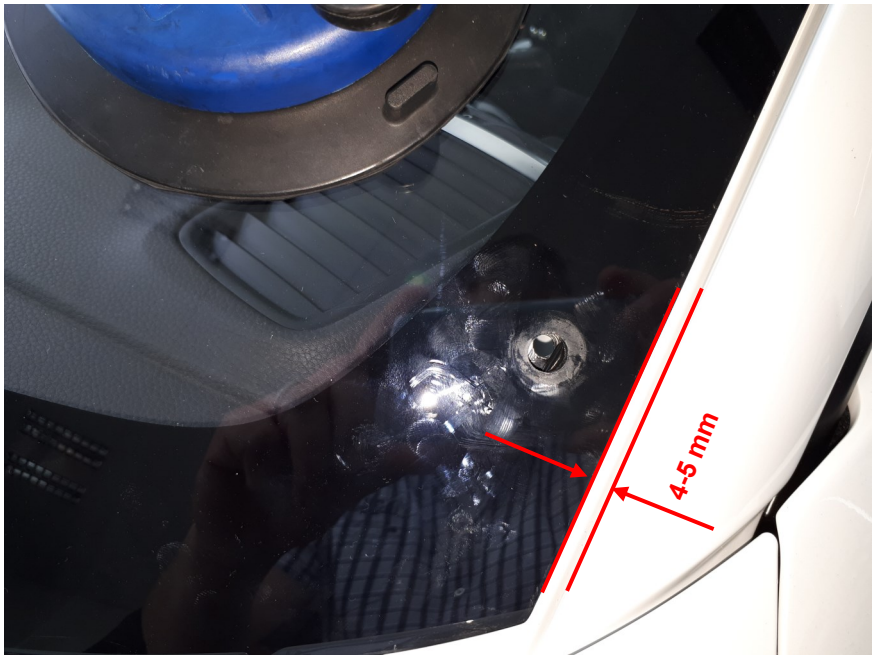
Step 7:

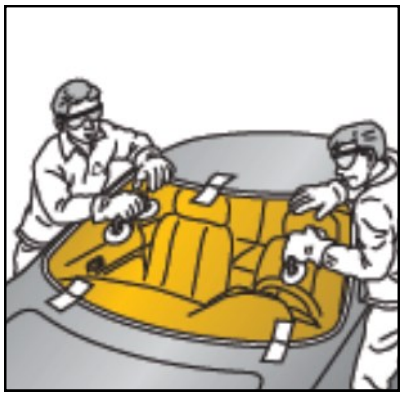
Apply primer 207 in the glueing area of the windshield.

NOTE

The windshield has already been pretreated with primer 207in the glueing area. The second application of the primer 207 is mandatory. Note the ventilation time of the primer of 30 minutes (at 20°C). Lower temperatures extend the ventilation time. Do not use at temperatures below 5°C.

Step 6:





Step 8:

Step 9:

Step 8:

Drill through the window frame at the marked points with a 6.5mm carbide drill bit.

NOTE

The window frame is made of high-strength steel. The use of a carbide drill bit is recommended. Drill at low speed and medium pressure.

WARNING

Wear personal protective equipment. Danger of injury due to rotating cutting tools and flying chips

Step 9:

Once the window frame and the polycarbonate windshield have been prepared and the ventilation time of the primer has been achieved, the windshield can be glued in. Using a suitable caulking press, apply the included SIKA TACK DRIVE adhesive with the supplied tip at a 90° angle to the surface.

NOTE

The application of the adhesive at a 90 ° angle is important in order to form a sufficiently high triangular bead.
The adhesive has a maximum processing time of 15 minutes at 23°C. At higher temperatures and higher humidity, the processing time drops to a maximum of 5 minutes. During this time, the windscreen must be installed and positioned. Align the windscreen and press it lightly into the adhesive until the windscreen rests against the spacers. Check the alignment of the holes in the window frame with the holes in the windshield!

Step 10:

Insert the supplied spacers with the countersunk screws into the two holes of the windscreen / windscreen frame.

Secure these from the inside with the included collar nuts.

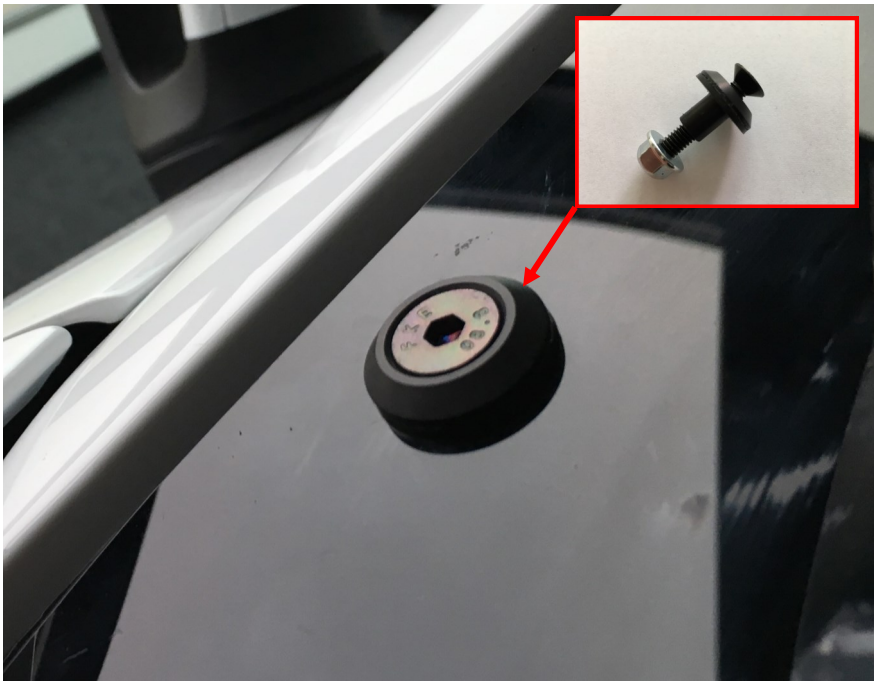
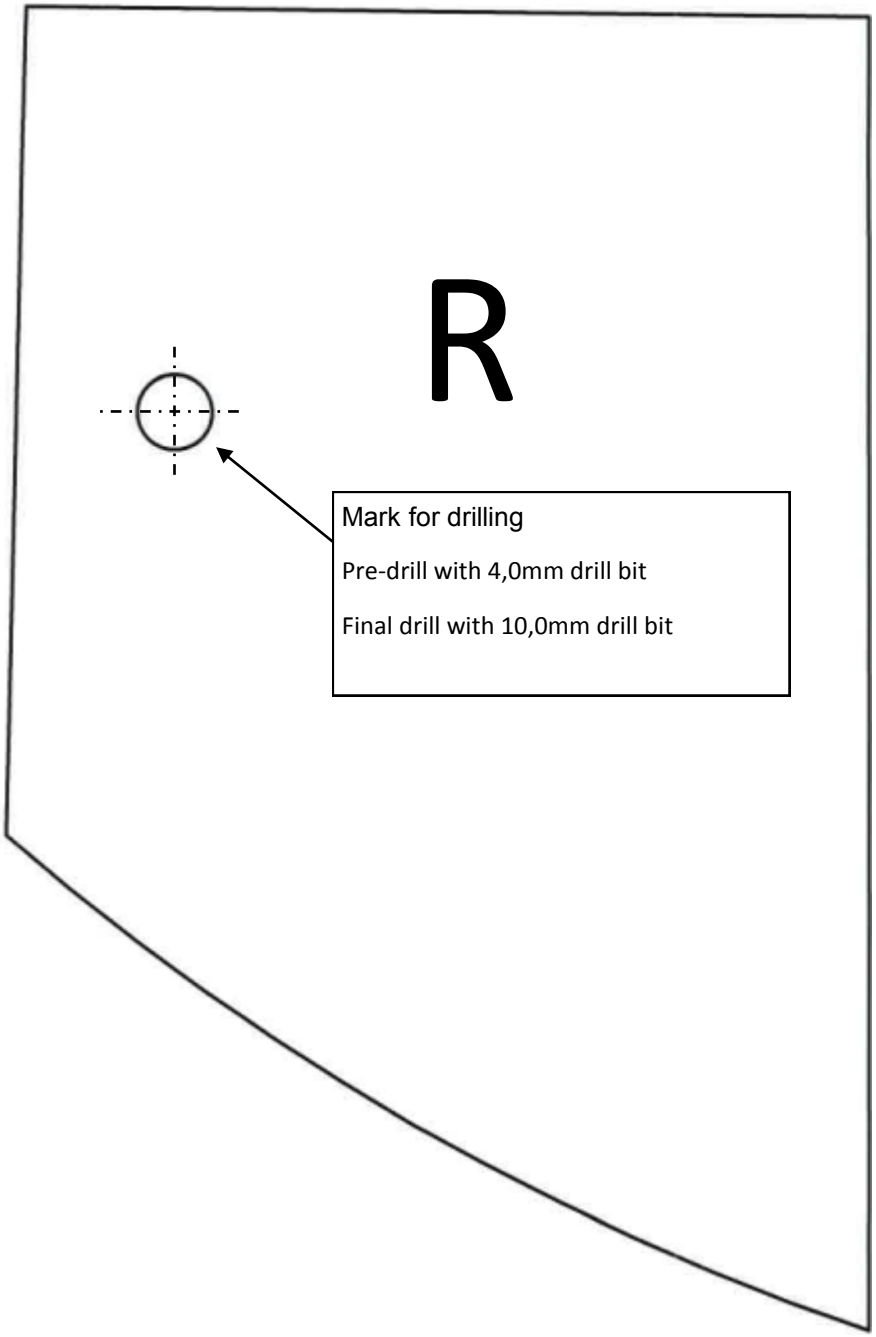
NOTE

Tightening torque of the collar nuts: 10 Nm

NOTE

Do not move the vehicle for the next 24 hours and do no further work on the vehicle.
After completion of the curing time, the parts disassembled in step 1 (inner mirror, cowl and wipers) can be reassembled.

Step 10:



Template for marking the drill holes on the polycarbonate windshield. Please cut out and position as shown in the instructions on the edge of the window.